



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,701	01/12/2004	Shunpei Yamazaki	07977-276002 / US4942D1	9100
26171	7590	04/10/2008	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			NGUYEN, DAO H	
			ART UNIT	PAPER NUMBER
			2818	
			MAIL DATE	DELIVERY MODE
			04/10/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/754,701	<b>Applicant(s)</b> SEMICONDUCTOR ENERGY LAB	
	<b>Examiner</b> DAO H. NGUYEN	<b>Art Unit</b> 2818	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 40-109 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-109 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>0208</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Office Action is in response to the communications dated 02/01/2008.  
Claims 40-109 are active in this application.  
Claim(s) 1-39 have been cancelled.

### Remarks

2. Applicants' argument(s), filed 02/01/2008, have been fully considered, but are moot in view of new ground of rejection.

### Claim Rejections - 35 U.S.C. § 103

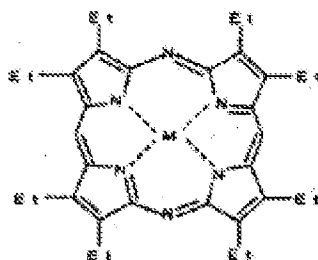
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim(s) 47-62, 64, and 65 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tang et al. (US 5,684,365), in view of Forrest et al. (US 6,310,360), and further in view of Kimura (US 6,518,941).**

Regarding claim 47, Tang discloses a light emitting device, shown in figs. 1-8, comprising:

a transistor (fig. 8);  
an electroluminescent element EL electrically connected to the transistor;  
a driver circuit configured to apply signals to a gate electrode of the transistor  
(col. 2, line 48); and  
a power source electrically connected to the electroluminescent element EL via  
the transistor, configured to apply an operation voltage of the electroluminescent  
element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col.  
10, line 14),  
wherein the electroluminescent element EL includes a thin film 82 (fig. 8)  
including a luminescent material expressed by a following formula:



wherein Et represents ethyl group; and M represents an element belonging to  
group 8 to 10 of a periodic table (col. 8, lines 15-44).

Tang fails to disclose the driver circuit configured to apply digital signals to the  
gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding claim 48, Tang/Kimura disclose the device wherein M is an element selected from the group consisting of nickel, cobalt and palladium. See col. 8, lines 15-44 of Tang.

Regarding claims 49-54, Tang/Kimura disclose the device comprising all claimed limitations. See col. 1, line 21- col. 2, line 37 and figs. 1-8 of Tang.

Regarding claim 55, Tang discloses a light emitting device, shown in figs. 1-8, comprising:

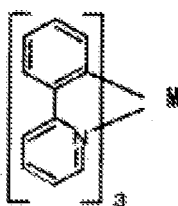
a transistor (fig. 8);

an electroluminescent element EL electrically connected to the transistor;

a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and

a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14),

wherein the electroluminescent element EL includes a thin film 82 (fig. 8) including a luminescent material expressed by a following formula:



wherein Et represents etyl group; and M represents an element belonging to group 8 to 10 of a periodic table (col. 8, line 64 – col. 9, line 51).

Tang fails to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding claim 56, Tang/Kimura disclose the device wherein M is an element selected from the group consisting of nickel, cobalt and palladium. See col. 8, lines 15-44 of Tang.

Regarding claims 57-62, Tang/Kimura disclose the device comprising all claimed limitations. See col. 1, line 21- col. 2, line 37, and figs. 1-8 of Tang.

Regarding claims 64-65, Tang/Kimura discloses the light emitting device comprising all claimed limitations. See col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61 of Kimura. Nevertheless, it is noted that since this invention is about a device itself, not about method(s) for operating a device, therefore, "method of operating a device" limitation(s) would not have patentable weight on device claim(s).

**5. Claim(s) 40-46, 63, and 66-109 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Tang et al. (US 5,684,365), in view of Forrest et al. (US 6,310,360), and further in view of Kimura (US 6,518,941).**

Regarding claim 40, Tang discloses a light emitting device, shown in figs. 1-8, comprising:

an electroluminescent element using a luminescent material (col. 6, line 9 – col. 8, line 44) ;

a transistor electrically connected to the electroluminescence element (fig. 8);

a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and

a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent



Art Unit: 2818

element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14).

Tang is silent on the electroluminescent element in which electroluminescence is obtained by triplet excitation.

Forrest discloses a light emitting device comprising an electroluminescent element using a luminescent material (fluorescent emitter, sensitizer molecular or ISC Agent, phosphorescent emitter; col. 9, line 18 to col. 11, line 18) in which electroluminescence is obtained by triplet excitation (col. 2, line 58 to col. 3, line 53; col. 5, lines 9-27: the ISC Agents convert all of the excitations/excitons into their triplet excitations/excitons, which do emit; see also col. 15, lines 21-50; col. 16, lines 31-35).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of Tang to use a luminescent material in which electroluminescence is obtained by triplet excitation, as that taught by Forrest, in order to enhance optical purity and increase efficiency of the emission (see col. 3, lines 45-54, and col. 12, lines 17-24 of Forrest).

Tang/Forrest fail to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710

Art Unit: 2818

electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang/Forrest to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding to claim 41, Tang/Forrest/Kimura discloses the device wherein the transistor is a thin film transistor. See figs. 1-8 of Tang.

Regarding claims 42-46, Tang/Forrest/Kimura disclose the device comprising all claimed limitations. See col. 1, line 21- col. 2, line 37 and figs. 1-8 of Tang.

Regarding claim 63, Tang/Forrest/Kimura discloses the light emitting device comprising all claimed limitations. See col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61 of Kimura. Nevertheless, it is noted that since this invention is about a device itself, not about method(s) for operating a device, therefore, "method of operating a device" limitation(s) would not have patentable weight on device claim(s).

Regarding claim 66, Tang discloses a light emitting device comprising:

- an electroluminescent element EL comprising a first electrode (Anode Electrode), a second electrode (Top electrode), and a luminescent material 82 interposed between the first and the second electrodes (fig. 8);
- a transistor having a source region, a drain region and a gate electrode (Poly-Si Gate, fig. 8);
- a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and
- a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14),

wherein any one of the source and drain region is electrically connected to the first electrode (Anode Electrode).

Tang is silent on the electroluminescent element in which electroluminescence is obtained by triplet excitation.

Forrest discloses a light emitting device comprising an electroluminescent element using a luminescent material (fluorescent emitter, sensitizer molecular or ISC Agent, phosphorescent emitter; col. 9, line 18 to col. 11, line 18) in which electroluminescence is obtained by triplet excitation (col. 2, line 58 to col. 3, line 53; col. 5, lines 9-27: the ISC Agents convert all of the excitations/excitons into their triplet excitations/excitons, which do emit; see also col. 15, lines 21-50; col. 16, lines 31-35).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of Tang to use a luminescent material in which electroluminescence is obtained by triplet excitation, as that taught by Forrest, in order to enhance optical purity and increase efficiency of the emission (see col. 3, lines 45-54, and col. 12, lines 17-24 of Forrest).

Tang/Forrest fails to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang/Forrest to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding to claim 67, Tang/Forrest/Kimura discloses the device wherein the transistor is a thin film transistor. See figs. 1-8 of Tang.

Regarding claims 68-72, Tang/Forrest/Kimura disclose the device comprising all claimed limitations. See col. 1, line 21- col. 2, line 37, and figs. 1-8 of Tang.

Regarding claim 73, Tang discloses a light emitting device comprising:

an electroluminescent element comprising:

a first electrode (Anode Electrode), a second electrode (Top electrode),  
and a luminescent material 82 interposed between the first and the second  
electrodes (fig. 8);

a transistor having a source region, a drain region and a gate electrode (Poly-Si Gate, fig. 8),

a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and

a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14),

wherein the transistor is a p-channel transistor (figs. 1-8),

wherein any one of the source and drain region is electrically connected to the first electrode (Anode Electrode).

Tang is silent on the electroluminescent element in which electroluminescence is obtained by triplet excitation.

Forrest discloses a light emitting device comprising an electroluminescent element using a luminescent material (fluorescent emitter, sensitizer molecular or ISC Agent, phosphorescent emitter; col. 9, line 18 to col. 11, line 18) in which electroluminescence is obtained by triplet excitation (col. 2, line 58 to col. 3, line 53; col. 5, lines 9-27: the ISC Agents convert all of the excitations/excitons into their triplet excitations/excitons, which do emit; see also col. 15, lines 21-50; col. 16, lines 31-35).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of Tang to use a luminescent material in

which electroluminescence is obtained by triplet excitation, as that taught by Forrest, in order to enhance optical purity and increase efficiency of the emission (see col. 3, lines 45-54, and col. 12, lines 17-24 of Forrest).

Tang/Forrest fails to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang/Forrest to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding claims 74-80, Tang/Forrest/Kimura discloses the device comprising all claimed limitations. See col. 1, line 21- col. 2, line 37, and figs. 1-8 of Tang.

Regarding claim 81, Tang discloses a light emitting device comprising:

an electroluminescence element comprising:

an anode electrode, a cathod (Top electrode), and a luminescent material

82 interposed between the anode and the cathode (fig. 8);

a transistor having a source region, a drain region and a gate electrode (Poly-Si Gate, fig. 8),

a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and

a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14),

wherein any one of the source and drain region is electrically connected to the anode.

Tang is silent on the electroluminescent element in which electroluminescence is obtained by triplet excitation.

Forrest discloses a light emitting device comprising an electroluminescent element using a luminescent material (fluorescent emitter, sensitizer molecular or ISC



Agent, phosphorescent emitter; col. 9, line 18 to col. 11, line 18) in which electroluminescence is obtained by triplet excitation (col. 2, line 58 to col. 3, line 53; col. 5, lines 9-27: the ISC Agents convert all of the excitations/excitons into their triplet excitations/excitons, which do emit; see also col. 15, lines 21-50; col. 16, lines 31-35).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of Tang to use a luminescent material in which electroluminescence is obtained by triplet excitation, as that taught by Forrest, in order to enhance optical purity and increase efficiency of the emission (see col. 3, lines 45-54, and col. 12, lines 17-24 of Forrest).

Tang/Forrest fails to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang/Forrest to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that

Art Unit: 2818

taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding claim 82, Tang/Forrest/Kimura disclose the device wherein the transistor is a p-channel transistor. See figs. 1-8 of Tang.

Regarding claim 83-88, Tang/Kimura disclose the device comprising all claimed limitations. See figs. 1-8 of Tang.

Regarding claim 89, Tang discloses a light emitting device comprising:

an electroluminescent element comprising:

a first electrode (Anode Electrode), a second electrode (Top electrode), and a luminescent material 82 interposed between the first and the second electrodes (fig. 8);

a transistor having a source region, a drain region and a gate electrode (Poly-Si Gate, fig. 8),

a driver circuit configured to apply signals to a gate electrode of the transistor (col. 2, line 48); and

a power source electrically connected to the electroluminescent element EL via the transistor, configured to apply an operation voltage of the electroluminescent element which is 10 v or less (col. 2, lines 38-47; col. 5, lines 35-37; col. 9, line 60-col. 10, line 14),

wherein an LDD region is not particularly provided between the source region and the drain region,

wherein any one of the source and drain region is electrically connected to the first electrode (Anode Electrode).

Tang is silent on the electroluminescent element in which electroluminescence is obtained by triplet excitation.

Forrest discloses a light emitting device comprising an electroluminescent element using a luminescent material (fluorescent emitter, sensitizer molecular or ISC Agent, phosphorescent emitter; col. 9, line 18 to col. 11, line 18) in which electroluminescence is obtained by triplet excitation (col. 2, line 58 to col. 3, line 53; col. 5, lines 9-27: the ISC Agents convert all of the excitations/excitons into their triplet excitations/excitons, which do emit; see also col. 15, lines 21-50; col. 16, lines 31-35).

It would have been obvious to one of ordinary skills in the art at the time the invention was made to modify the invention of Tang to use a luminescent material in which electroluminescence is obtained by triplet excitation, as that taught by Forrest, in order to enhance optical purity and increase efficiency of the emission (see col. 3, lines 45-54, and col. 12, lines 17-24 of Forrest).

Tang/Forrest fails to disclose the driver circuit configured to apply digital signals to the gate electrode of the transistor.

Kimura discloses a light emitting device comprising an electroluminescent element 10810 (figs. 1, 2) using a luminescent material and a thin film transistor 10710 electrically connected to the electroluminescent element 10810, and a driver circuit that is configured to apply digital signals to the gate electrode of the transistor 10710 to switch the transistor on/off. See further col. 2, lines 19-49; col. 3, line 47 to col. 4, line 61.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Tang/Forrest to include a driver circuit that is configured to apply digital signals to the gate electrode of the transistor, as that taught by Kimura, in order to reduce the nonuniformity in the luminous intensity of the luminescent element, caused by the nonuniformity in the conductance of the transistor, thereby improving the image quality of the device (col. 2, lines 1-10, and lines 19-49 of Kimura.) Furthermore, such modification would greatly improve the performance of the device of Tang due to an ease in controlling the device.

Regarding claims 90-95, Tang/Forrest/Kimura disclose the device comprising all claimed limitations. See figs. 1-8 of Tang.

Regarding claims 96-109, Tang/Forrest/Kimura disclose the device comprising all claimed limitations. See col. 1, line 21-col. 3, line 5 of Tang.

### Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dao Nguyen whose telephone number is (571)272-1791. The examiner can normally be reached on Monday-Friday 9:00am - 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Art Unit: 2818

supervisor, Steven Loke, can be reached on (571)272-1657. The fax numbers for all communication(s) is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1633.

/Dao H Nguyen/

Primary Examiner, Art Unit 2818  
April 6, 2008